

Remarks

1. Claim status

Claims 1-12 are pending and have been rejected. Claims 1-3, 5-8 and 10-11 were
 5 rejected under 102(b) as being anticipated by *Karinkanta* (US 3,964,872). Claim 4 was rejected
 under 103(a) as being unpatentable over *Karinkanta*. Claims 9 and 12 were rejected under 103(a)
 as being unpatentable over *Karinkanta* and further in view of *Kovar* (US 5,882,939).

2. Claim amendments

Claims 1 and 6 have been amended to include an additional limitation and to correct an
 antecedent reference. Specifically, each claim has been amended to make clear the sorptive
 coating referenced is selected to partition at least one analyte from the analyte-bearing sample
 15 (disclosed in the Specification at page 6, lines 28-34 and page 8, lines 1-4) and to correct the
 reference in the desorbing and introducing steps to apply to the "at least one analyte" rather than
 simply the analyte, which would have been inconsistent with the antecedent basis.

Claims 7, 11, and 12 were likewise amended to include the additional limitation that the
 sorptive coating referenced is selected to partition at least one analyte from the analyte-bearing
 20 sample.

Claim 13 has been added to provide a further independent claim, based on the prior
 version of independent claim 1, including the additional limitations of:

- ☐ being for use with a heated gas chromatograph having an injection port housing
 (Specification, p. 7, lines 1-9);
- ☐ the tubular member sized for use as an injection port liner, sized to fit within the injection
 port housing (Specification, p. 7, lines 1-9);

- ☐ installing said tubular member in said injection port housing of said gas chromatograph (Specification, p. 7, lines 1-9); and
- ☐ increasing the temperature of injection port housing by heating from said heated gas chromatograph until said at least one analyte is desorbed from said coated tubular member (Specification, p. 7, lines 7-12).

Claim 14 has been added to include the additional limitation that the sorptive coating referenced in claim 13 is selected to partition at least one analyte from the analyte-bearing sample. (Specification, p. 6, lines 28-34 and p. 8, lines 1-4)

5 **3. Rejection of claims 1-3, 5-8 and 10-11 under 102(b) as being anticipated by Karinkanta (US 3,964,872)**

Applicants disagree with the Examiner's rejection of claims 1-3, 5-8 and 10-11 under 102(b) and would show that rejected independent claims 1, 6, and 7 are not anticipated by *Karinkanta* as the independent claims include a limitation not found in *Karinkanta*. "A claim is
 10 anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). By virtue of the amendment of claims 1, 6, 7
 15 and 11 to include the limitation that the sorptive coating referenced is selected to partition at least one analyte from the analyte-bearing sample, claims 1-3, 5-8 and 10-11 contain an element not
 found in *Karinkanta*. Rather, *Karinkanta* actually teaches away from the partition of an analyte from the sample and instead teaches teaches sorption of the entire sample and fractionation thereafter of the entire sample along the sorption layer. *Karinkanta* is clear that the entire sample is adsorbed and then fractionated into the entirety of its components in the adsorptive material by absorption of a solvent:

The sample is adsorbed on the porous surface as a small spot. Thereafter a suitable solvent is absorbed up along the porous surface, whereby the sample components move in the direction of the front of the solvent, each at a velocity determined by its properties. Thus the sample is fractionated into its components.

Karinkanta, Col. 1, Lines 58-64. The claimed inventions, however, teach away from sorption of the entire sample and fractionation thereafter, teaching instead selection of a sorptive material to partition at least one specific analyte from the sample, and thereafter releasing the remainder of the sample:

Tubular member 100 is then agitated with a mechanical shaker (not shown) for a predetermined period of time, allowing sorptive coating 150 to contact analyte-bearing sample 250 and extract at least one analyte. When the volume of analyte-bearing sample 250 is small, the extraction should occur very rapidly. Plugs 180 are then removed from inlet 102 and outlet 104, releasing the remaining analyte-bearing sample 250.

Specification, page 6, lines 28-34. The claimed inventions, unlike *Karinkanta*, teach the use a sorptive coating to partition a particular analyte or analytes from the sample, not to capture the entire sample:

The selection of the type of functional groups permits the partitioning of a particular analyte or analytes from the sample. The polysiloxane coating may be a polymer, a copolymer or a combination of polymers.

Specification, page 8, lines 1-4.

4. Rejection of claim 4 under 103(a) as being unpatentable over *Karinkanta*.

Applicants disagree with the Examiner's rejection of claim 4 under 103(a) and would show that rejected dependent claims 4 is not unpatentable over *Karinkanta*, as shown above the independent claims include a limitation not found in *Karinkanta* and from which *Karinkanta* teaches away - the use of a sorptive coating to partition a particular analyte or analytes from the sample, not to capture the entire sample.

5. Rejection of claims 9 and 12 under 103(a) as being unpatentable over *Karinkanta* and further in view of *Kovar*.

Applicants disagree with the Examiner's rejection of claims 9 and 12 under 103(a) as unpatentable and would show that rejected claims 9 and 12 by *Karinkanta* as the independent claims include a limitation not found in *Karinkanta*, teach away from the limitation found in *Karinkanta* and from any modification of *Karinkanta* in view of *Kovar*. As amended, claims 9 and 12 both contain the limitation of a sorptive coating to partition a particular analyte or analytes from the sample, not to capture the entire sample, a limitation not found in *Karinkanta* and, as detailed above, which *Karinkanta* teaches away from. Modification of *Karinkanta* to include the roughened surfaces of *Kovar* does not alter this fact.

6. Conclusion

In light of the foregoing, the pending claims are patentable over the cited art as the art and proposed combinations each lack an element of the pending claims. Applicant requests the issuance of a notice of allowability.